

**Table 3. HiTEC FCCBS Core Technology Projects
(initiated FY05)**

Organization	Title of Project
United Technology Research Center	Techno-Economic Feasibility of Highly Efficient, Cost-Effective, Thermoelectric SOFC Hybrid Power Generation Systems
Northwestern University	Use of High-Temperature Electrochemical Cells for Co-Generation of Chemicals and Electricity
University of Utah	High-Temperature Electrochemical Energy -Storage System Based on Sodium Beta-Alumina Solid Electrolyte (BASE)
SRI International	Effect of Coal Contamination on SOFC System Performance and Service Life
Massachusetts Institute of Technology	Photo-Activated Low Temperature, Micro Fuel Cell Power Source

The selected projects focus primarily on SOFC and SOFC-based technology. Coal-based power production systems that incorporate SOFCs have the potential for significantly higher efficiencies and lower emissions than conventional technologies. In addition, high-temperature electrochemical systems can enhance energy storage capability in central coal power plants, reducing the impact felt during hours of peak demand and making the plants more cost effective.